

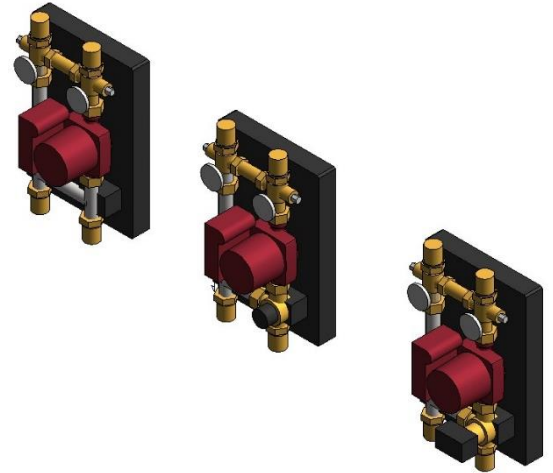
# HydroMixer™

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165, 166, 167 Series

## Revit Content Instructions Guide

**Manufacturer & Product:** Caleffi 165, 166, 167 HydroMixer  
*Direct\_Distribution\_Unit-HydroMixer-Caleffi-165.rfa*  
**Files:** *Direct\_Distribution\_Unit-HydroMixer-Caleffi-166.rfa*  
*Direct\_Distribution\_Unit-HydroMixer-Caleffi-167.rfa*  
*Direct\_Distribution\_Unit-HydroMixer-Caleffi-165.txt*  
*Direct\_Distribution\_Unit-HydroMixer-Caleffi-166.txt*  
*Direct\_Distribution\_Unit-HydroMixer-Caleffi-167.txt*  
**Type Catalogs:**  
**Rendering file:** Not Applicable  
**Schedule file:** Not Applicable



These families contain the following main variations or types:

- 1in. NPT Union\_165600A
- 1in. NPT Union\_165610A
- 1in. NPT Union\_165602A
- 1in. NPT Union\_165612A
- 1in. Sweat\_165602A
- 1in. Sweat\_165612A
- 1in. Sweat\_165600A
- 1in. Sweat\_165610A
- 1in. NPT Union\_166600A
- 1in. NPT Union\_166610A
- 1in. NPT Union\_166602A
- 1in. NPT Union\_166612A
- 1in. Sweat\_166602A
- 1in. Sweat\_166612A
- 1in. Sweat\_166600A
- 1in. Sweat\_166610A
- 1in. NPT Union\_167600A
- 1in. NPT Union\_167610A
- 1in. NPT Union\_167602A
- 1in. NPT Union\_167612A
- 1in. Sweat\_167602A
- 1in. Sweat\_167612A
- 1in. Sweat\_167600A
- 1in. Sweat\_167610A

### Instance Properties

Here is a curated list of notable parameters for the Revit user within the Caleffi 165, 166, 167 HydroMixer families.

Construction	
Adjustable Differential Pressure by-pass Valve (default)	This controls the display of an adjustable differential pressure by-pass valve.
Outer Casing (default)	This controls the display of an outer casing.
Wall Bracket (default)	This controls the display of a wall bracket.
Mechanical - Flow	
Flow Warning (default)	This tells you if the flow exceeds or falls below what is recommended.
Recirculation Water Percentage (default)	Specify recirculated water percentage.
Hot Water Percentage (default)	This tells you the hot water percentage.
Return Water Inlet Flow (default)	Specify return water inlet flow.
Return Water Outlet Flow (default)	This tells you the return water outlet flow.
Recirculation Water Flow (default)	This tells you the recirculation water flow.

Hot Water Inlet Flow (default)	This tells you the water inlet flow.
Tempered Water Outlet Flow (default)	Specify the tempered water outlet flow.
<b>Mechanical - Loads</b>	
Heating Water Pressure Drop (default)	Specify the heating water pressure drop.
Pressure Drop Feet of Water (default)	Specify the pressure drop in feet of water.
System Pressure Drop (default)	This tells you the system pressure drop.

## Type Properties

Here is a curated list of notable parameters for the Revit user within the Caleffi 165, 166, 167 HydroMixer families.

Materials	
Casing Material	Polypropylene - Caleffi - EPP
Connecting Pipe Material	Metal - Caleffi - Stainless Steel
Hex Nut Material	Metal - Caleffi - Stainless Steel
Temperature Gauge Body Material	Metal - Caleffi - Stainless Steel
Valve body Material	Metal - Caleffi - Brass

Note: Standard Caleffi materials are imported. These may be modified, but please ensure that the modification selection matches an actual manufacturer supplied option.

Identity Data	
Assembly Code	D3040
Contact URL*	<a href="http://www.caleffi.com/usa/en-us/contacts/contact-us">http://www.caleffi.com/usa/en-us/contacts/contact-us</a>
Copyright*	©Caleffi North America
Cost	
Description	Direct distribution unit with Grundfos UPS 15-58 pump on right side
Family Version*	1
Keynote	
Manufacturer	Caleffi North America, Inc.
Model	165600A
Product Page URL*	<a href="https://www.caleffi.com/usa/en-us/catalogue/hydromixertm-injection-pump-mixing-unit-165600a">https://www.caleffi.com/usa/en-us/catalogue/hydromixertm-injection-pump-mixing-unit-165600a</a>
Type Comments	
Type Image	
Series*	165 Series
URL	<a href="https://www.caleffi.com/usa/en-us">https://www.caleffi.com/usa/en-us</a>

Half-tone text in the property tables indicates that the value is locked from editing.

\*Indicates Shared Parameter and can be scheduled

## Rendering

### Loading and Placing into the Project

To work with the Caleffi 165, 166, 167 HydroMixer in Revit, multiple families and variations within type catalogs are provided. Navigate to the Insert Tab > Load Family button on the Revit ribbon to load the family. Be sure the type catalog (.txt) file is located in the same folder as the family you are loading.

Please ensure that the visibility settings within the project are modified to have the Mechanical category visible.

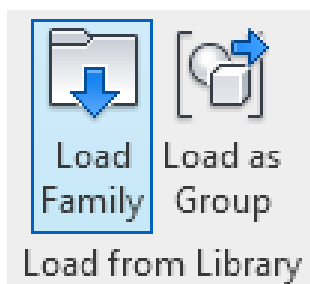


Figure 1 - Insert Tab > Load Family

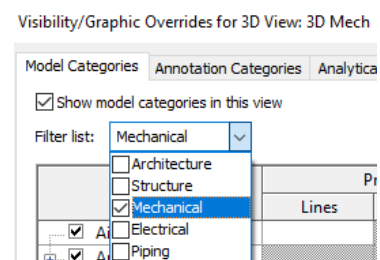
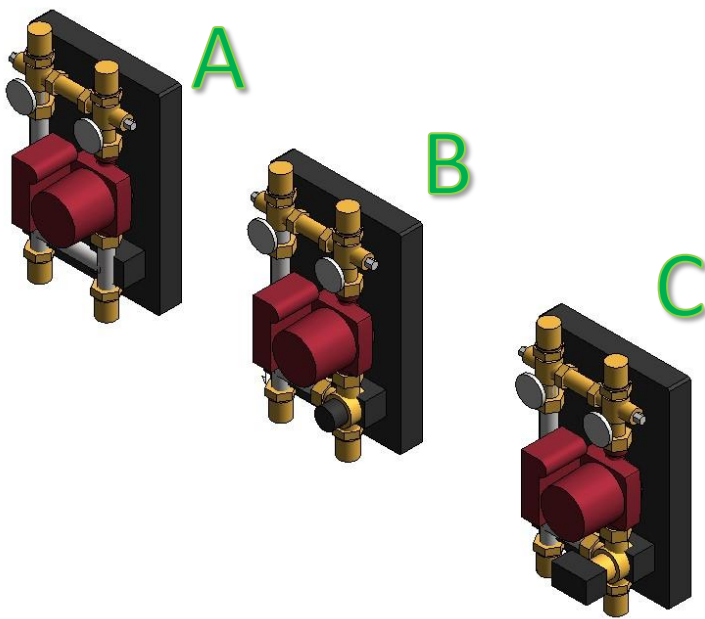


Figure 2 - Visibility/Graphic Overrides



- A. 165 HydroMixer
  - a. Shown with pump on the right
  - b. Pump on the left is also an option
  - c. Multiple pump options are available
- B. 166 HydroMixer
  - a. Shown with pump on the right
  - b. Pump on the left is also an option
  - c. Multiple pump options are available
- C. 167 HydroMixer
  - a. Shown with pump on the right
  - b. Pump on the left is also an option
  - c. Multiple pump options are available

Figure 3 - Caleffi 165, 166, 167 HydroMixer

## Project Behavior

One way to place a Caleffi 165, 166, 167 HydroMixer is to go to the Systems Tab on the Revit ribbon and navigate to the Component button with Place a Component fly-out selected.

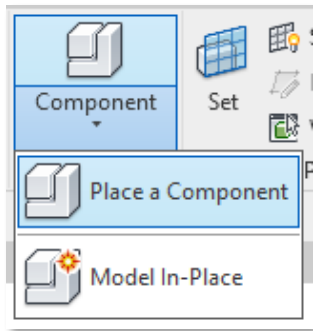


Figure 4 - Systems Tab > Component > Place a Component

The Caleffi 165, 166, 167 HydroMixer families include multiple instance options configuration once placed.

- Adjustable Differential Pressure by-pass Valve
  - Valve present
  - Valve not present
- Outer Casing
  - Casing present
  - Casing not present
- Wall Bracket
  - Wall Bracket present
  - Wall Bracket not present
- Recirculation Water Percentage
- Heating Water Pressure Drop
- Pressure Drop Feet of Water

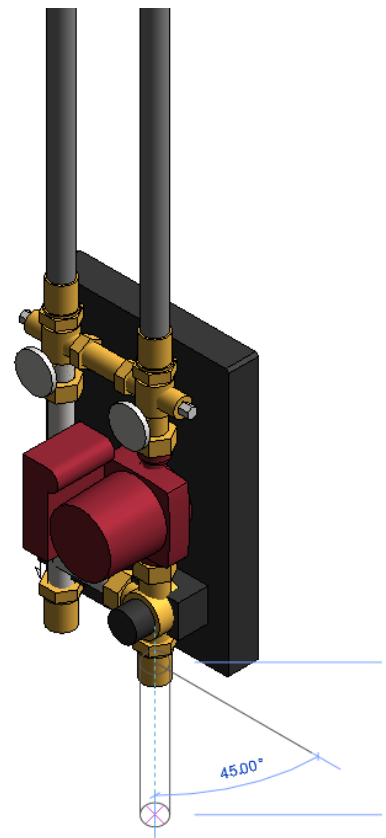


Figure 5 - Drawing pipe from HydroMixer in a system via right click > draw pipe

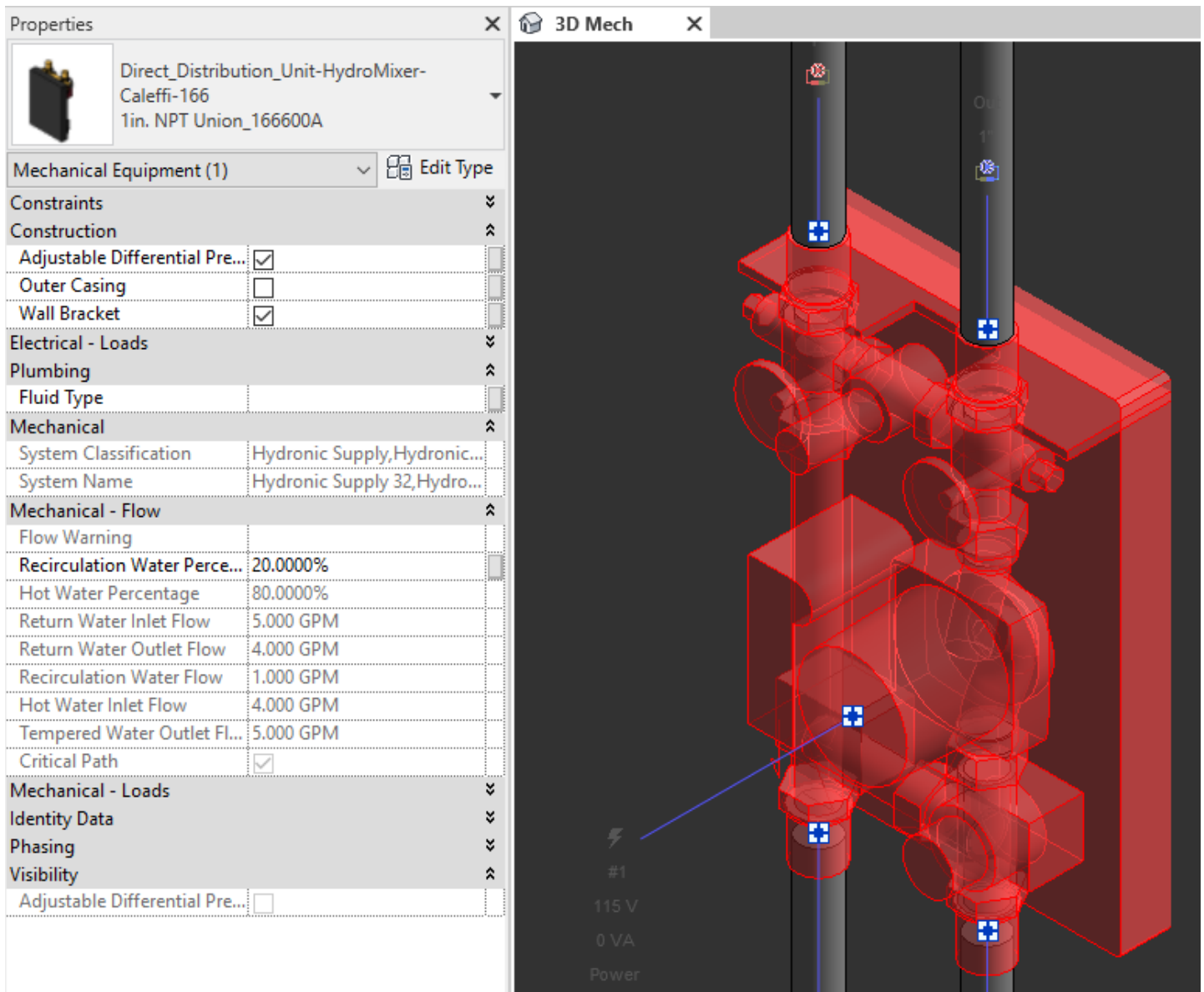


Figure 6 – The Adjustable Differential Pressure by-pass Valve and Wall Bracket boxes were checked to show those options in the model. Other user input areas include Recirculation Water Percentage, Heating Water Pressure Drop, and Pressure Drop Feet of Water.

## Schedule Creation

Within the type and instance properties dialogues, the Revit user will find useful information for scheduling purposes such as Type, Part Description, Part Number/Model, Family Version, Manufacturer, Series, & Product Page URL. The resulting Mechanical Equipment schedule in your project will show counts/quantities of the Caleffi 165, 166, 167 HydroMixer as well as separate quantities/counts of any separately purchased accessory products that do not come in box with the Caleffi 165, 166, 167 HydroMixer.